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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,004	07/23/2001	Moo-Youn Park	5000-1-214	3695
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EXAMINER

PETKOVSEK, DANIEL J

ART UNIT

PAPER NUMBER

2874

DATE MAILED: 02/03/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/911,004

Applicant(s)

PARK, MOO-YOUN

Examiner

Daniel J Petkovsek

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2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: Brian Healy

DETAILED ACTION

This office action is in response to the amendment filed on October 29, 2002. In accordance with the amendment claims 1, 5, and 8 have been amended.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in-

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

2. Claims 1-11 are rejected under 35 U.S.C. 102(e) as being anticipated by Kim et al. U.S.P. Publication Application 2001/0008466 A1.

Kim et al. '466 teach a method (Fig 3) for fabricating an optical fiber grating comprising the steps of directing a light beam 31 onto a first lens 34, which focuses the light beam in a perpendicular direction to optical fiber, the light beam then oriented by a second movable concavely shaped lens 35 (shown to be able to traverse the range of d1 to d2 from Fig 3 to Fig 6 (Col 3, 1st paragraph)), which diverges the light beam onto the mask 36 (with elongated openings spaced apart by a predetermined interval). Also, during any movement by lens 35, the period of the optical fiber grating is changed.

Regarding claims 1-7, the method would inherently include the apparatus. Regarding claims 3 and 7, the image will inherently change as the lens 35 moves to and/or away from

optical fiber. Regarding claims 4 and 9, Kim et al teach positioning mask 36 a pre-determined position away from optical fiber 37. Regarding claims 6 and 10, Kim et al teach a mask 36 with an array of openings for the transmittal of the laser source. Regarding claims 2 and 11, Kim et al teach a concavely shaped lens 35.

Conclusion

Applicant's arguments filed October 29, 2002 have been fully considered.

3. Applicant traverses the rejection of claims 1-7 by asserting that the Jang et al. reference fails to teach, show or suggest a mobile lens, disposed to intercept the focused light beam from said lens, for diverging the focused light beam along the lengthwise direction of said optical fiber and changing the period of the optical fiber grating. The disclosure on pages 6 and 7 of Jang et al., as cited by Applicant, show that the amplitude mask 108 is the component that is mobile and thus changes the distance x between the lens 106 and mask 108. The lens 106 is stationary in the teaching of Jang et al. The 35 USC 102 (b) rejections to claims 1-7 to Jang et al. are overcome in view of amended claims 1 and 5.

Applicant traverses the rejection of claims 8-11 by asserting that the Kim reference fails to teach, show or suggest the specific steps of orienting a first lens so as to focus the light beam at a perpendicular direction to said optical fiber, orienting a second lens so as to intercept the focused light beam from said first lens and to diverse the focused light beam along the lengthwise direction of said optical fiber, and, traversing said second lens along said perpendicular direction so as to change the light image projected along said optical fiber and

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period of the optical fiber grating through said mask. The mobility of the second lens is shown in the change in distance from Fig 3 to Fig 6. This argument has been fully addressed in the rejection of claims 8-11, and is not persuasive. The claim language does not overcome the reference of Kim.

Claims 1-7 are rejected under 35 USC 102(e) to Kim, as fully addressed in the rejection of claims 1-11 above.

4. This action is made **NON-FINAL**, since rejections to claims 1-7 are new upon the reference of Kim et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel J Petkovsek whose telephone number is (703) 305-6919. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on (703) 308-4819. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 872-9321.



Daniel Petkovsek
January 28, 2003



Brian Healy
Primary Examiner